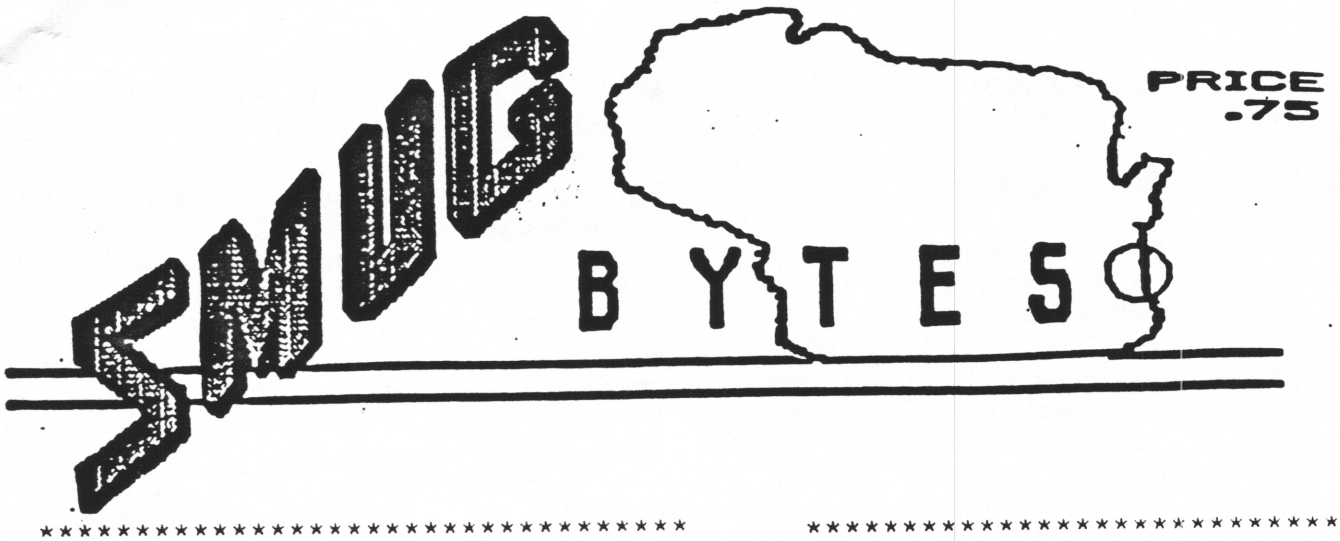

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THIS MONTH:

- *Bill On OL One More Time.*
- *Dr. Llyod Dreger*
- *Rudy's "SQ" NOTES*
- *Presidents Message*
- *And Other Great Things*

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NEXT MEETING DATE: 7/13/88

Send all contributions by the first day of the month to:

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Meeting date see Spectrum group.

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FROM THE PRES.

Two things I want to mention. The first is that we are not giving up on the TS1000 let alone the TS2068. Although the input for the TS1000 is very sparse within our group we will answer any questions we can and even hold teach basic basic to those requesting it. If we can't get enough for a class talk to Dick Cultice and we will arange to have a one on one class.
The second thing is the upcoming Computerfests - IF ANY ONE IS INTERESTED IN GOING PLEASE CONTACT ME.

To jog your memory here is the information again. The Cleveland group is sponsoring one August 26 & 27. For the West Coast and any others who wish to go is the 3rd Northwest Computerfest in Portland Oregon. If you've never attended one try it you'll like it. The bus trip from Milwaukee is 2 days 8 hrs and $121 or flying from Milwaukee is $318 if reservations made in advance. Lastly the train (AMTRAC) is $218 and 50 hours.

Ham and Computer fests coming up Sat. JULY 9, the SMARC presents SWAPFEST88 Oak Creek. Amer. Legion Post

"SQ" NOTES

BY R.A.HILSMANN

Time to look back to some of the programs you have found here in the past, especially the LIBRARY and RECOVER program needs to be updated. "Haste makes waste", this has been a good demonstration of it.

But enough about that, lets do it. This month an update of the LIBRARY program, which as I mentioned last month, had a few features added to it since you have seen it in this column. In fact the changes are great enough to reprint the entire program ones more, and also the instructions to use it.

Next month I will review the RECOVER program, perhaps in its entirety, depending on the amount of changes I will make to it. Some of you have perhaps noted, it does not work with single sided drives, fact is it was written for quad-density drives, and its major feature is to rebuild the directory ones lost.

I feel this is important enough, since SDOS (Safe DOS) in its syntax does not ask for the drive number when the command "FORMAT/"name" is entered. Criticism? I hope it is not viewed that way since I think John Oliger has done a fantastic job writing the DOS, just a sugestion, if space and time permits to perhaps change the syntax, at least for "FORMAT" to "FORMAT/2"name", which of course would make the user aware to specify the drive number when doing such a major task like formating a disk, rather than expecting flaky computer users to do a "LET/D=2" before formating, something easely forgotten.

I have managed to do this twice with an important disk in the other drive, but then I have been called flaky in the past, especially since I still use such an outdated computer as the 2068 Timex/Sinclair. Little do they know.

```
 1 REM Fill this line with
       spaces for machine code
       to here 345678901234<

 15 REM
    ************************
    *  DISK LIBRARY PROGRAM *
    *   VERSION 1.4 (SDOS)  *
    *  ©1988 IMPEX SOFTWARE *
    *    BY R.A. HILSMANN   *
    *   FOR PUBLIC DOMAIN.  *
    ************************

  20 CLEAR : LET A=NOT PI: DIM A
$(VAL "179",VAL "20"): DIM L$(VA
L "10"): DIM B$(VAL "32"): DIM C
$(VAL "608"): LET O=A: LET I=SGN
 PI: DIM K$(VAL "6",VAL "5"): LE
T K$(I)="BASIC": LET K$(VAL "2")
="DATA#": LET K$(INT PI)="DATA$"
: LET K$(VAL "4")="CODE ": LET K
$(VAL "5")="STATE": LET K$(VAL "
6")="VRBLS": INK VAL "9": PAPER
I: BORDER I: LET E=PEEK VAL "236
35"+VAL "256"*PEEK VAL "23636"+V
AL "5"
  30 CLS : LET MENU=VAL "50": LE
T C=VAL "10": LET P=VAL "70": LE
T Q=VAL "80": LET R=VAL "100": G
O SUB P: LET F=0: PRINT TAB VAL
"6";"DISK LIBRARY PROGRAM"'TAB V
AL "6";"©1988 IMPEX SOFTWARE"'"*
*******************************"
''''''"PRESS"''"1) TO CREATE A N
EW LIBRARY FILE"''"2) TO LOAD AN
 EXISTING FILE ": PRINT #0;"ENTE
R 1 OR 2": PAUSE 0: IF INKEY$="2
" THEN GO SUB P: INPUT "FROM WHI
CH DRIVE ARE YOU LOADINGENTER DR
IVE # (1 TO 4) >";K: CLS : GO TO
 VAL "7040"
  40 GO SUB P: INPUT "HOW MANY F
ILES IN NEW DISK FILE?(800 MAX T
/S - 900 MAX SINCLAIR) >";FL: DI
M E$(FL+I,VAL "27"): LET E$(I, T
O VAL "3")=STR$ I: GO SUB P: INP
UT "ENTER NAME OF NEW LIBRARY FI
LE"''D$: LET E$(I,VAL "4" TO VAL
 "13")=D$: LET E$(I,VAL "14" TO
VAL "16")=STR$ FL
  50 GO SUB 0: GO SUB P: CLS : P
RINT AT 0,6-INT (LEN D$/2);"DISK
 LIBRARY FILE >";E$(I,VAL "4" TO
 VAL "13");AT I,0;"**************
******************"'"1) SEARCH
OR LIST PROGR. & LOAD "''"2) CHA
NGE DISK NAME (DISK&LIBR.)"''"3)
 ADD A DISK FILE. (TO LIBRARY)"'
'"4) DELETE DISK FILE (FROM LIBR
.)"''"5) UPDATE A DISK FILE (LIB
RARY)"''"6) SORT LIBRARY FILES (
ALPHA)"''"7) LOAD OR SAVE LIBRAR
Y DATA "''"8) LIST LIBRARY FILES
 TO PRINTER"
  60 PRINT '"9) CREATE NEW DISK
FROM FILES"'"[redacted]"''"CAPACITY ";FL;T
AB 14;">";Y;" FILES ENTERED": PR
INT #0;">>>>>>>>>> PRESS 1 TO 9 <
<<<<<<<<": PAUSE 0: GO TO (CODE
INKEY$-48)*1E3
  70 BEEP .08,35: RETURN
  80 LET Y=VAL E$(I, TO INT PI)-
I: RETURN
 100 PRINT " ENTER ZERO (0) TO E
XIT TO MENU [redacted]": RETURN
```

```
 110 PRINT "DISK WILL BE CATALOG
ED NOW"''"PRESS ENTER WHEN PROMP
TED TO "''"SCROLL !!": RETURN
 120 PRINT "INSERT DISK INTO"''"
APPROPRIATE DRIVE AND "''"ENTER
DRIVE NUMBER BELOW"
 130 PRINT AT 21,0;"DRIVE # (1 T
O 4) OR (0) TO EXIT ": RETURN
1000 GO SUB 0: CLS : GO SUB R: G
O SUB P: INPUT "ENTER NAME OF PR
OGRAM FOR SEARCH"''"OR PRESS ENT
ER FOR LISTING OF"''"ALL LIBRARY
 FILES"''''"SEARCH-NAME CAN BE P
ARTIAL,"''"AS FOR ""PROGRAM"" =
""PROG"";AT VAL "15",0;F$: IF F
$="0" THEN GO TO MENU
1010 IF F$="" THEN GO TO VAL "10
60"
1020 FOR /I TO Y: IF E$(A+I,I TO
 LEN F$)=F$ THEN GO TO VAL "1040
"
1030 NEXT : CLS : GO SUB P: PRIN
T AT C,VAL "2";"PROGRAM CAN NOT
BE LOCATED"'': GO SUB R: PAUSE
0: GO TO MENU
1040 CLS : GO SUB P: GO SUB R: P
RINT AT VAL "5",0;"FILE > ";E$(A
+I, TO C)''"ON DISK: ";E$(A+I,VA
L "12" TO VAL "27")''" TO LOAD
THE FILE FROM ABOVE"''"NAMED DIS
K, ";: GO SUB VAL "120": INPUT K
: IF K>0 THEN LET A=A+I: GO TO V
AL "1220"
1050 GO TO MENU
1060 CLS : PRINT "1=PAGING * ENT
ER=LOAD *ZERO=EXITFILE-NAME  TYP
E  DISK-NAME"'"*****************
**************": GO SUB 0: LET
F=Y+I: GO TO 1130
1070 LET G=3: LET H=1: FOR /S TO
 J: PRINT AT G,0; INVERSE 1; OVE
R 1;B$: PAUSE 0: LET B=CODE INKE
Y$: IF B=13 THEN GO TO 1210
1080 IF B=48 THEN GO TO MENU
1090 IF B=49 THEN LET A=J+1: LET
 K=K+380: GO SUB 1227: GO SUB 11
10: GO TO 1190
1100 PRINT AT G,0; INVERSE 0;B$:
 GO SUB 1170: NEXT
1110 PRINT AT 3,0;C$: IF A>F THE
N RANDOMIZE USR E: GO TO 1130
1120 RETURN
1130 GO SUB P: LET S=2: LET J=1
1140 PAUSE 2: LET G=3: LET H=0:
IF F-S>=18 THEN LET J=J+19: GO T
O 1160
1150 LET J=F
1160 LET K=PEEK 23376+256*PEEK 2
3377: FOR /S TO J
1170 IF F THEN PRINT AT G,0;E$(A
, TO 10);TAB 11;K$(1+CODE E$(A,1
1));TAB 17;E$(A,12 TO 26): LET G
=G+1: IF H THEN RETURN
1180 NEXT : GO SUB 1227: GO SUB
1070
1190 IF A-1<=F THEN LET S=A
1200 GO TO 1140
1210 GO SUB P: INPUT "INSERT DIS
K & ENTER DRIVE #";K: IF K=0
THEN GO TO MENU
1220 LET /D=K-VAL "1": LET L$=E$
(A, TO C): GO TO VAL "1220"+CODE
 E$(A,VAL "11")+I
1221 LOAD /L$: STOP
1222 LOAD /L$ DATA A(): STOP
1223 LOAD /L$ DATA E$(): STOP
1224 LOAD /L$CODE : STOP
1225 LOAD /L$ABS
1226 LOAD /L$VAL : STOP
1227 POKE 23376,K-256*INT (K/256
): POKE 23377,INT (K/256): RETUR
N
1999 GO TO MENU
2000 CLS : GO SUB P: GO SUB R: P
RINT AT C,0;: GO SUB VAL "120":
INPUT K: IF K=0 THEN GO TO MENU
2010 LET /D=K-I: GO SUB P: CLS :
 PRINT AT C,0;: GO SUB VAL "110"
: PAUSE R+R: CAT : RANDOMIZE USR
 E: CLS : LET F$=A$(VAL "178", T
O VAL "16"): PRINT AT C,0;"OLD D
ISK NAME ";F$: INPUT "ENTER NEW
DISK NAME BELOW THEN "''"PRESS E
NTER. (16 CHR$ MAX)";AT VAL "6",
0;B$( TO VAL "16"): LET A$(VAL "
178", TO VAL "16")=B$( TO VAL "1
6"): RANDOMIZE USR (E+VAL "64")
2020 GO SUB 0: FOR /1 TO Y: IF E
$(A+1,12 TO 27)=F$ THEN LET E$(A
+1,12 TO 27)=B$
2030 NEXT
2100 LET B$="": GO TO MENU
3000 CLS : GO SUB P: GO SUB R: P
RINT "''" TO ADD DISK TO THE LIB
RARY,"'': GO SUB VAL "120": GO S
UB VAL "130": INPUT K: IF K=0 TH
EN GO TO MENU
3010 LET /D=K-I: CLS : PRINT AT
C,0;: GO SUB VAL "110": PAUSE R+
R: CAT : LET F=USR E: GO SUB VAL
 "3030": CLS : GO SUB P: GO SUB
R: PRINT AT VAL "8",0;"DISK TO B
E ADDED TO THE LIBRARY:"''"DISK
NAME: ";A$(VAL "178")''"FORMATED
TO ";CODE A$(VAL "179",I);" TRKS
, ";CODE A$(VAL "179",I+I);" SID
ES"''"CAPACITY ";CODE A$(VAL "179
",INT PI)*VAL "5";" K"''"REMAININ
G DISK SPACE: ";CODE A$(VAL "179
",VAL "5")*VAL "5";" K"''''"PRESS
 ANY KEY TO ADD DISK TO THEDISK-
LIBRARY": PAUSE 0: IF INKEY$="0"
 THEN GO TO MENU
3020 FOR /Y TO Y+F-1: LET E$(A+1
, TO 11)=A$(A-Y+1, TO 11): LET E
$(A+1,12 TO 27)=A$(178): NEXT :
LET E$(I, TO INT PI)=STR$ A: GO
TO MENU
3030 IF F=0 THEN PRINT '''TAB VA
L "8";"NO FILES ON DISK"'': GO S
UB R: PAUSE 0: GO TO MENU
3040 GO SUB 0: LET Y=Y+I: FOR /2
 TO Y: IF E$(A,12 TO 27)=A$(178,
 TO 16) THEN CLS : PRINT AT C,0;
"DISK ALREADY PRESENT IN LIBRARY
"'': GO SUB R: PAUSE 0: GO TO ME
NU
3050 NEXT : RETURN
4000 CLS : GO SUB P: GO SUB R: L
ET B=0: INPUT "ENTER NAME OF DIS
K FILE TO BE  DELETED FROM THE
DISK-LIBRARY"''''F$: IF F$="0" T
HEN GO TO MENU
4010 CLS : PRINT AT C,0;"DELETIN
G DISK ";F$: GO SUB 0: FOR X=2 T
O Y+I
4020 IF E$(X,12 TO 11+LEN F$)=F$
 THEN GO SUB VAL "4050": LET Y=Y
-I: LET E$(I, TO INT PI)=STR$ (Y
+I): GO TO VAL "4020"
4030 NEXT X: IF B THEN RETURN
4040 GO TO MENU
```

```
4050 FOR /X TO Y+I: IF A=FL THEN
 IF E$(A,12 TO 12+LEN F$)=F$ THE
N LET E$(A)="": RETURN
4060 LET E$(A)=E$(A+1): NEXT : R
ETURN
5000 CLS : GO SUB P: PRINT AT C,
0;"TO UPDATE A DISK FILE IN THE"
''"DISK LIBRARY, ";: GO SUB 120:
 INPUT K: IF K=0 THEN GO TO MENU
5010 LET /D=K-I: CLS : PRINT AT
C,0;: GO SUB VAL "110": PAUSE R+
R: CAT : RANDOMIZE USR E: LET F$
=A$(VAL "178", TO VAL "16"): GO
SUB R: LET B=I: GO SUB VAL "4010
": CAT : LET F=USR E: LET Y=Y+I:
 LET E$(I, TO 3)=STR$ Y: GO TO V
AL "3020"
6000 CLS : GO SUB R: GO SUB P: P
RINT AT C,C;"SORTING"''"THIS MAY
 TAKE A WHILE (BASIC!!!)": GO SU
B Q: LET S=I
6010 LET S=S*2: IF S<=Y+I THEN G
O TO 6010
6020 LET S=INT (S/2): IF S=0 THE
N GO TO MENU
6030 FOR /2 TO Y+1-S: LET K=A
6040 LET B=K+S: IF E$(K)<=E$(B)
THEN GO TO 6060
6050 LET F$=E$(K): LET E$(K)=E$(
B): LET E$(B)=F$: LET K=K-S: IF
K>1 THEN GO TO 6040
6060 IF INKEY$="0" THEN GO TO ME
NU
6070 NEXT : GO TO 6020
7000 CLS : GO SUB P: GO SUB R: P
RINT AT C,0;" TO OR FROM WHICH D
RIVE ARE YOU"''TAB INT PI;"SAVIN
G OR LOADING DATA ?": INPUT "DRI
VE # >";K: IF K=0 THEN GO TO MEN
U
7010 LET /D=K-I: GO SUB P: PRINT
 ''"ENTER ""L"" FOR LOADING"''"
      ""S"" FOR SAVING": INPUT F$
: IF F$="L" OR F$="l" THEN GO TO
 VAL "7040"
7020 CLS : GO SUB P: PRINT AT C,
0;"DATA TO BE SAVED IS: ";E$(I,V
AL "4" TO VAL "13")''"DO YOU WIS
H TO CHANGE THE NAME?": INPUT "(
Y/N) ";F$: IF F$="Y" OR F$="y" T
HEN GO SUB P: INPUT "ENTER NEW N
AME ";E$(I,VAL "4" TO VAL "13")
7030 SAVE /E$(I,VAL "4" TO VAL "
13") DATA E$(): GO TO MENU
7040 LET /D=K-I: PRINT AT C,0;"E
NTER NAME OF DATA TO BE LOADED"'
''"OR TOKEN 'CAT' FOR CATALOG  "
7045 GO SUB P: INPUT "NAME OR CA
T ";D$: IF D$=" CAT " THEN CAT :
 GO TO VAL "7045"
7050 LOAD /D$ DATA E$(): LET FL=
VAL E$(I,VAL "14" TO VAL "16"):
GO TO MENU
8000 CLS : GO SUB P: GO SUB R: P
RINT AT C,0;"ARE YOU LISTING TO
A CENTRONIC"''"TYPE PRINTER ?? (
Y/N)": PAUSE 0: IF INKEY$="0" TH
EN GO TO MENU
8010 IF INKEY$="Y" OR INKEY$="y"
 THEN GO TO VAL "8030"
8020 CLS : LET /P=T: GO SUB Q: F
OR /2 TO Y+I: LPRINT E$(A, TO 10
);TAB 11;K$(1+CODE E$(A,11));TAB
 17;E$(A,12 TO 26): NEXT : GO TO
 MENU
8030 REM PRINTER CODES HERE
      EPSON FX/RX + SKIP OVER
      PERFORATION
8031 LET /P=0/G: OUT 127,27: OUT
 127,78: OUT 127,6
8040 CLS : GO SUB Q: FOR /2 TO Y
+I: LPRINT TAB 2;E$(A, TO 10);TA
B 14;K$(1+CODE E$(A,11));TAB 20;
E$(A,12 TO 27);
8050 IF A<Y+I THEN LPRINT TAB 42
;E$(A+1, TO 10);TAB 54;K$(1+CODE
 E$(A+1,11));TAB 60;E$(A+1,12 TO
 27): LET A=A+1: NEXT
8060 GO TO MENU
9000 CLS : GO SUB P: GO SUB R: P
RINT AT VAL "6",0;"THIS FEATURE
REQUIRES TWO DRIVES"''''"IF YOU N
EED TO FORMAT A DISK,"'': GO SUB
 VAL "120"
9010 PRINT AT VAL "19",0;"PRESS
ENTER TO RETURN TO MENU": INPUT
F$: IF F$="0" THEN GO TO MENU
9020 IF F$="" THEN GO TO VAL "90
50"
9030 CLS : GO SUB P: LET K=VAL F
$: PRINT AT C,0;"DISK WILL BE FO
RMATED NOW"''"DISK SHOULD BE IN
DRIVE ";K: LET /D=K-I: INPUT "EN
TER NAME FOR NEW DISK"''F$
9040 CLS : GO SUB P: PRINT AT C,
0;"IF DISK IS IN DRIVE "; FLASH
I;K; FLASH 0;" THEN PRESS"''"ENT
ER AND FORMATING WILL BEGIN": PA
USE 0: FORMAT /F$: LET F=USR E
9050 CLS : GO SUB P: PRINT AT C,
0;"MAKE SURE THE CORRECT DISKS A
RE"''"IN THE CORRECT DRIVES BEFO
RE"''"MOVING DATA FROM DISK TO D
ISK.": INPUT "ENTER DRIVE NUMBER
 FOR SOURCE   DISKS (1 TO 4) ";B
: GO SUB P: INPUT "ENTER DRIVE N
UMBER FOR "''"DESTINATION DISK (
1 TO 4)  ";S: LET S=S-I: CLS : PR
INT AT C,0;"INSERT DESTINATION D
ISK INTO"''TAB C;"DRIVE ";S+I;'T
AB INT PI;"PRESS ENTER WHEN READ
Y."'': PAUSE 0: CLS : PRINT AT C
,0;: GO SUB VAL "110": LET /D=S:
 PAUSE R+R: CAT : LET /D=B-I
9100 RANDOMIZE USR E: CLS : PRIN
T "1=PAGING * ENTER=MOVE *ZERO=E
XIT DISK SPACE, DEST. DRIVE >":
GO SUB 9270: PRINT "************
**********************": GO SUB Q:
 LET F=Y+I: GO TO VAL "9170"
9110 LET G=3: LET H=1: FOR /T TO
 J: PRINT AT G,0; INVERSE 1; OVE
R 1;B$: PAUSE 0: LET U=CODE INKE
Y$: IF U=13 THEN GO SUB VAL "925
0": GO SUB VAL "9270"
9120 IF U=48 THEN GO TO MENU
9130 IF U=49 THEN LET A=J+1: LET
 K=K+360: GO SUB 9260: GO SUB 91
50: GO TO 9230
9140 PRINT AT G,0; INVERSE 0;B$:
 GO SUB 9210: NEXT
9150 PRINT AT 3,0;C$: IF A>F THE
N RANDOMIZE USR E: GO TO 9170
9160 RETURN
9170 GO SUB P: LET T=2: LET J=1
9180 PAUSE 2: LET G=3: LET H=0:
IF F-T>=17 THEN LET J=J+18: GO T
O 9200
9190 LET J=F
9200 LET K=PEEK 23376+256*PEEK 2
3377: FOR /T TO J
9210 PRINT AT G,0;E$(A, TO 10);T
AB 11;K$(1+CODE E$(A,11));TAB 17
;E$(A,12 TO 26): LET G=G+1: IF H
 THEN RETURN
```

```
9220 NEXT : GO SUB 9260: GO SUB
9110
9230 IF A-1<=F THEN LET T=A
9240 GO TO VAL "9180"
9250 GO SUB P: PRINT #0;"INSERT
SOURCE DISK INTO DRIVE )";B;"
PRESS ENTER TO MOVE DATA ";
PAUSE 0: LET L$=E$(A, TO C): GO
TO VAL "9250"+CODE E$(A,C+I)+I
9251 MOVE /L$ TO S: RANDOMIZE US
R E: RETURN
9252 MOVE /L$ DATA TO S: RANDOMI
ZE USR E: RETURN
9253 MOVE /L$ DATA $ TO S: RANDO
MIZE USR E: RETURN
9254 MOVE /L$CODE TO S: RANDOMIZ
E USR E: RETURN
9255 MOVE /L$ABS TO S: RANDOMIZE
 USR E: RETURN
9256 MOVE /L$VAL TO S: RANDOMIZE
 USR E: RETURN
9260 POKE 23376,K-256*INT (K/256
): POKE 23377,INT (K/256): RETUR
N
9270 PRINT AT 1,27;"    ";AT 1,2
7;CODE A$(179,5)*5;"K": RETURN
9500 REM INITALIZE PROGRAM WITH
          "RUN 9500" THEN
          DELETE LINE 9500 TO END
          UNLESS ENTERED IN THE
          TIMEX MODE.
9510 RESTORE 9520: FOR X=26715 T
O 26715+84: READ B: POKE X,B: NE
XT X: POKE 26711,0
9520 DATA 205,10,0,42,75,92,17,1
4,0,25,235,33,32,38,1,212,13,237
,176,33,16,38,14,16,237,176,229,
235,17,4,0,25,235,33,0,38,14,16,
237,176,225,17,20,0,62,128,190,4
0,4,3,25,48,249,42,75,92,17,42,0
,25,34,80,91,223,42,75,92,17,32,
14,25,17,16,38,1,16,0,205,10,0,2
37,176,205,142,10,223
9530 DELETE 9500,
9540 REM CHANGE 26715 IN LINE
          9510 TO 23760 TO 23760
          +84 IF ENTERD IN THE
          SINCLAIR MODE, ALSO
          OMIT LINE 9530
```

Enter the program with the 2068 in the TIMEX mode if possible, since this mode suports the delete necessarry to delete lines 9500 to end. The program will work in either mode ones saved and reloaded to be used. Needles to say, the program will work only with Safe DOS or SDOS as I prefer.

Here now the instructions to run the LIBRARY program.

Ones typed into the computer and initialized, save the program to disk, using;
CLEAR: SAVE/"LIBRARY" LINE 20
Reset or NEW your computer, and enter;10 LOAD/"LIBRARY", save this line to file 0, unless you elect to keep the LIBRARY program on a disk with other programs. Keeping it on a disk by itself will allow you to just type LOAD & ENTER to load it.

Version 1.4 has a few features the previous published program does not have, besides it has been debuged, but perhaps some more will surface as time goes on. Let me know if you find any.

Sorry about the basic sort in the program, but as soon as time permits I will write a machine code portion for it, like I said before, have a cup of coffee while it sorts in the meantime. Now a view hints on how it works!

Upon running, the program will ask you if you like to start a new file or like to load an existing one. Naturally you have to start a new one first, so press "1". Enter the number of entries you wish to make to the file next, keep in mind that when in the TIMEX MODE you wont have the luxory of having as much memory available as in the SPECTRUM MODE, it may be best to use a maximum of 800 files, since you may like to load a program while in the TIMEX MODE.

Having reached the MAIN MENU, you will see all the options available to you. Insert a disk into a drive and press option "3" to enter the files on that disk to the LIBRARY. Always scroll through the files when the program catalogs your disk, and follow the prompts.

The program should have returned you to the MAIN MENU now, where you will see the number of files you have entered just above the bottom line. Press "1" at this time and then press ENTER again. You will now get a listing of all the files you have entered. Pressing any key will permit you to scroll through the files with an inverted cursor,

pressing ENTER will load the program at the cursor position from the named disk. Pressing "1" will page through the files should you have more than 19 files in the LIBRARY, but lets get back to the MAIN MENU pressing the "0" key. Lets add a few more disks to the LIBRARY at this time.
I should mention that after pressing the "1" key, you have the option to use the search function and are able to load the searched program after inserting the named disk.

Try deleting a file after you have loaded it, or try the update a disk feature to get the feel for it now. Options "5" and "6".

Do you have a disk which has a funny name, like "test" and you always wanted to change that name? Yes you may do so now, using feature "2". This feature will not only change the disk name in the LIBRARY, but will also change the DISK NAME on the DISK (SDOS version 2. & up). Have the DISK to be changed in a drive and the LIBRARY FILE present at the same time, this will prevent confusion in your listings at a future time.

Lets see how fast a basic sort is next. Press "6" and watch the blinkenlight on John's board if you have nothing better to do. Believe it, this is the fastest sort there is in basic for this particular purpose, yes I tried a few others, but this one beats them all. Having close to 800 files in the LIBRARY and using the sort then, should really warm up the chips in your computer, so much for basic. Sorted listings let you find things a lot easier on a print out, but it will be better to have unsorted files to create a new disk from the LIBRARY since some programs have basic, screenfile and code to be moved, having different names for each.

If you have a printer hooked up and dont mind waisting some paper, press "8" now, and see what a printout looks like, but before, if you do not have have an EPSON type printer, check the printer codes on line 8030, don't wory about breaking into the program, "GO TO MENU" or "GO TO 50" will get you back to the MENU, but never use RUN, this will of course wipe out all the data. Change the printer codes on line 8030 if needed, consulting your printer manual of course. Also change the "LET/P=0/G" to whatever you have used in the past.

Next find a new disk, and press the "9" key. First, you will be able to format this new disk, but if you have a formated disk ready, or like to MOVE some files to a disk which already has some files on it, then just press ENTER to skip the format option. The destination DISK will be cataloged next, this will read the destination disk for the amount of disk space available on the disk, which will be constantly updated and displayed above the listings, this will make life easier.
You should see a listing of all your files next. Yes this is the same routine as the file 0 menu loader, one exception, pressing the ENTER key will MOVE the file at the cursor from the SOURCE drive to the DESTINATION drive now.
Just follow the prompts when using this function, make sure though, you always insert the appropiate disk into the source drive, otherwise you will get an error report. Typing "GO TO MENU" will get you back to the menu if this happens, or you may try using "CONTINUE" after inserting the correct disk, this should work, something I have not tried at this time.

Function "7" will of course allow you to save a LIBRARY FILE to disk, or allow you to load another FILE into the program.

One word of caution, do not tamper with line "20", but if you cant resist, do not define any variables ahead of the ones already defined, the machine code in line 0 looks for the defined variables in line 20 in a certain area of memory, so keep your poken fingers away from that line. Also do not take line 0 down to edit, not that this is possible, but if some of you poke a different line number into line 0, you will be able to do so, this will surely wipe out the code!!

Good luck, I hope you enjoy this program as I do. It was born out of necessity to clean up my disk library.
Let me know if you like it, this would be about all the profit I would make from writing it.

Your #3
R.A. HILSMANN (Rudy)

A Commitment--What It Takes

We all know of busy people who get a lot of things done and accomplish a lot of things. They seem to be successful at almost everything they decide to do. We feel inferior to these people because they seem to have so much talent. But is it really talent or is it something else?

What does it take to be a success at something? Some of it is brains. Some of it is training. But most of it is a commitment. With a strong enough a commitment, brains and training deficiencies are rapidly overcome.

The same sort of commitment applies to a sport or a hobby. You don't get on the Olympic Team without some sort of commitment of a major sort. You don't become a home computer expert or programmer without a committment as well.

This was brought out as a lesson again in the home computer boom of the early 1980's. It was the "in" thing back then to have a home computer. Most of us didn't know if we wanted to make that sort of commitment in dollars until the price of computers came down quite a bit. Many of us first took the plunge when the price got below the $100 mark and bought that first ZX81 or TS1000. It was sort of fun joining a User Group and rubbing elbows with a lot of other neophites. It was nothing to have over 100 people attending a user meeting.

Where are they now? All these people? How many are still active in computering?

Some went on to other computers as they found they had an experimenters toy and needed something more. I guess many expected a lot more for their small investment then what they got. So you expected a disk drive, monitor, printer and computer all for under $100? Every once in a while we get a person at a meeting that just picked up a ZX81 or TS1000 at a garage sale and is a bit shocked when told what all else he needs for what he wants to do with it. These people never wanted to be programmers or experimenters but only users. Fine but they are still in computering as they still use one albeit not their ZX81. They are still active in computering. We don't count them as being people who fell by the wayside.

Unfortunately, the boom also brought in a lot of people who weren't serious about computers. The mental bend of most of those kinds of people would be to rather watch TV than to do any sort of mental improvement such as computer programing with the screen. It takes a strong commitment to become a programmer just as it does to become an MD, lawyer or PhD. Lots of would be students don't seem to have sufficient commmitment and give up at the first difficulty. I've noticed this with college students as well as with hobbists.

The interesting thing about working the brain is that, like physical exercise, it improves it. You can't wear out your brain although as much as some people use it, it withers away from disuse. The other thing about the brain is that it does tire of the same thing after a while so shifting it to something else refreshes it. I work at one mental thing at work and another thing at home. Much like using different muscles. Of course, solving computering problems is a bit akin to climbing Everest. Why do we do it? Because the problem is there and becomes a personal challenge. We don't do it because it has already been done. There is a real sense of achievement in solving a really tough computering problem. Your really tough problem may not be as tough as my really tough problem but the sense of achievement is just as great.

Anyone who has ever tackled machine code knows the exhillerating sense of achievement when the @%$'!@% finally works.

But the same sort of sense of achievement was around when you tackled that Basic problem as well.

How many ZX and TS machines are gathering dust in attics and basements or end up in garage sales? Some of this is understandable as they were a bit unweildly and people outgrew them and needed something a bit more professional. But many people never outgrew them and just gave up after a halfhearted attempt. Over half fall by the wayside but a few come back for a second try and then usually succeed as they finally realize the commitment they have to make. Unfortunately, too few come back for that second try.

Lack of commitment seems to be the pervading way of life for a lot of people in the US. The phenomena is probably a national sentiment. Countries where people have a stronger sense of commitment are not only gaining on the US but in many cases have surpassed us. Lack of commitment is a fast way of becoming second or even third rate. Many people want a big paycheck but don't want to do anything much to earn it or even do any study to qualify for it. It takes quite a slow learner to be so slow you can't teach him/her anything. I bend over backwards for students who really want to learn but are having a hard time at it. I don't go out of my way for those that don't want to learn. Commitment is something you grow up with. Its something you and you alone can do. But you have to do it to achieve anything worthwhile.

You can learn about commitment the easy way by going after some purposeful goal, becoming what you want to be, or you will learn about it the hard way by never accomplishing anything in your life and then wondering why you never did. The road to... is paved with good intentions etc.

Do something useful with that spare time you all have. A person once asked me how much time I spent at a computer during the week at home. I thought for a while adding up the hours mentally that I had spent in the previous two weeks and came up with a answer of 40 hours a week. Everyone has more free time than that every week away from his job unless he is a workaholic putting in 70 hour weeks. If you spend from 6 to 11 every night and all day Saturday and Sunday you have over 60 hours of free time to spend and still leave time for eating and sleeping. What you do with this free time is up to you. You can do something useful or you can fall asleep watching TV--must have been a really exciting program! Granted that the 40 hour weeks at the computer were an intensive period where I really was working on something interesting but that still means I had 20 hours to do other things as well like mow the lawn, clean the house, etc. Nobody says you have to make that full a commitment to something but it shows what can be done if you really want to. Again it is up to you.

One word of caution. There can be such a thing as too much commitment if it's for the wrong thing. If something is a hobby, don't make the commitment to your hobby stronger than your commitment to your work. I have seen that end up in disaster for people. Work comes first.

Bill on QL

If you do not have a QL you should get one it is a GREAT machine. You can learn about the other part of the computing comunity, the non TS2068 one. How they must suffer. But it is the real world with many advantages over the TS2068 like Word Processing, with Spelling Checkers, or high-res graphics or many of the data processing large memds 85 degrees. I recemend a small (3") fan placed at the back of the unit on the network side. This will cool the memory, micro drives and, if you have one, Trump Card. Note the fan should blow away from the QL. The following is a small program that can be used to benchmark a program. It will calculate the elapsed running time of a program. The program to be benchmarked must follow these rules:

1. Can not use line 1. This line will run both the benchmark program and the program to be benchmarked.

2. The end of the program, STOP or just ending the program, must occur at the physical end of the program or benchmark will not work. Do this by GO TO the first line after the end of your program.

The program will date stamp the run and print it, if you request it, so set the date and time if you wish the correct information to appear on the printout. The following is a program that can be used to benchmark a program. It will calculate the elapsed running time of a program.

The program to be benchmarked must follow these rules:

1. Can not use line 1. This line will run both the benchmark program and the program to be benchmarked.

2. The end of the program, STOP or just ending the program, must occur at the physical end of the program or benchmark will not work. Do this by GO TO the first line after the end of your program.

The program will date stamp the run and print it, if you request it, so set the date and time if you wish the correct date and time to appear on the printout. To run the program MERGE the two programs together, and run. When the program starts you will be asked for the program name. If a name is not wanted press enter. After the name the program will save the start time, from the clock, and run your program. When completed the program will display the start and ending time, the date, and the elpased time.

```
    1 GO SUB 32739:GO SUB 2:GO SUB 32743:STOP
32738 RETurn
32739 CLS:INPUT 'Enter program name ';name$:CLS
32740 LET start_date = DATE
32741 RETurn
32742 REMark 2nd part of program
32743  MODE 8:CLS:PRINT 'Program start '; DATE$
32744 LET end_date = DATE
32745 PRINT 'Program ended ';DATE$
32746 PRINT
32747 LET elapsed_time = (end_date - start_date)
32748                                   LET full_date1$=DATE$(elapsed_time)
32749 LET yymmdd$=DATE$
32750 LET full_date1$(1 to 12) = yymmdd$(1 to 12)
32751 LET full_date1$=yymmdd$ & 'Elapsed time is ' & full_date1$(13 to ) & 'Program name is ' & name$
32752 PRINT full_date$
32753 PRINT:PRINT 'Hardcopy also? (Y or N)'
32754 LET ynswitch$ = INKEY$ (-1)
32755 IF ynswitch$ ='y' or ynswitch ='Y' THEN :
32756     OPEN #3,ser1
32757     PRINT #3,full_date$
32758     CLOSE #3
32759     GO TO 32765
32760  ELSE
32761  IF ynswitch$ ='n' or ynswitch$ ='N' THEN :
32762     GO TO 32765
32763  ELSE
32764     GO TO 32754
32765 END IF
32766 RETurn
```